

Indicators for Sustainable Development Policies in The Netherlands

**experiences and deliberations from a small but
rich delta society in a global economy and
ecology**

Part 1: Concepts



Concept 1

The Domains of Sustainable Development

Concept 1

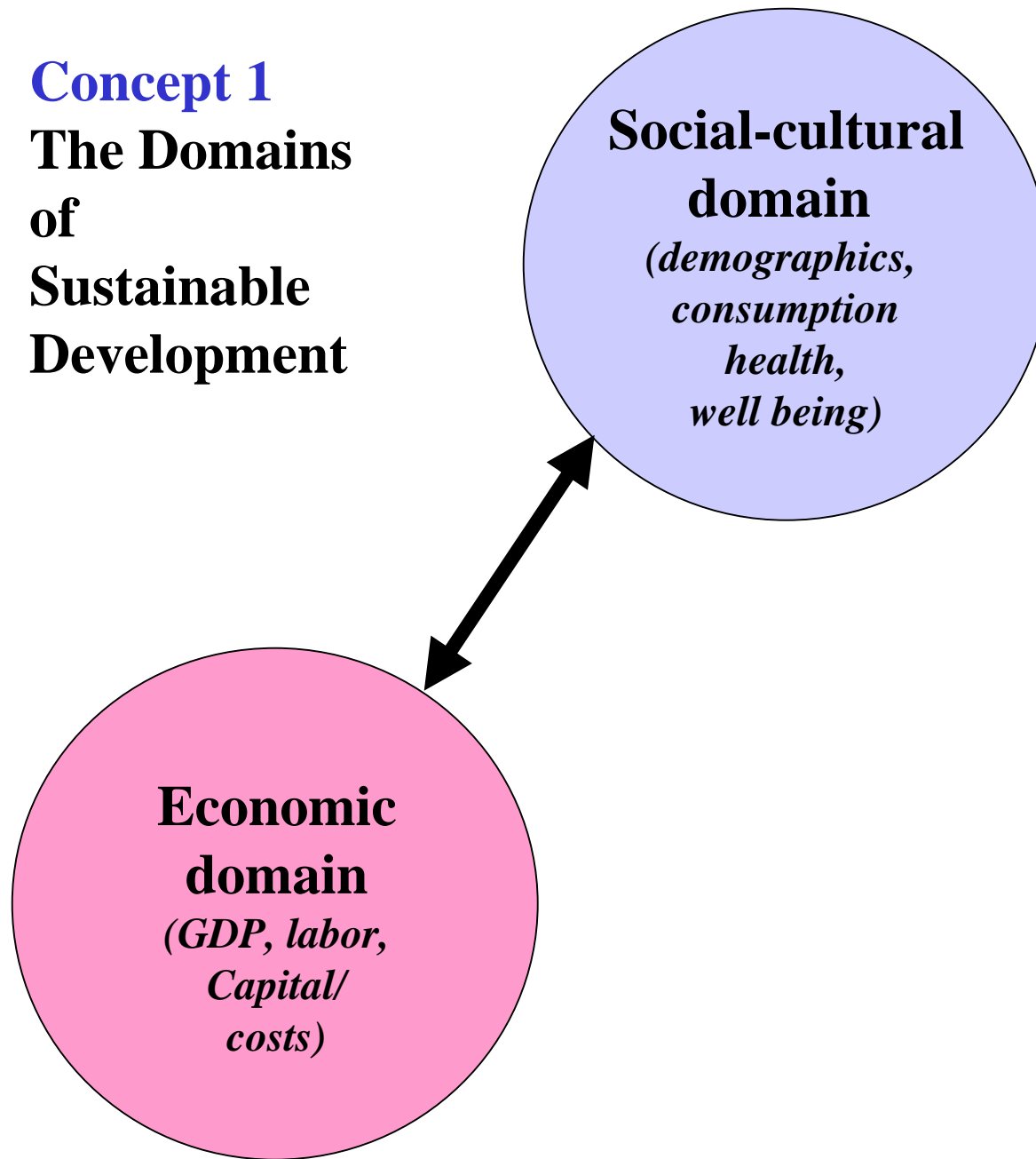
The Domains of Sustainable Development



**Economic
domain**
*(GDP, labor,
Capital/
costs)*

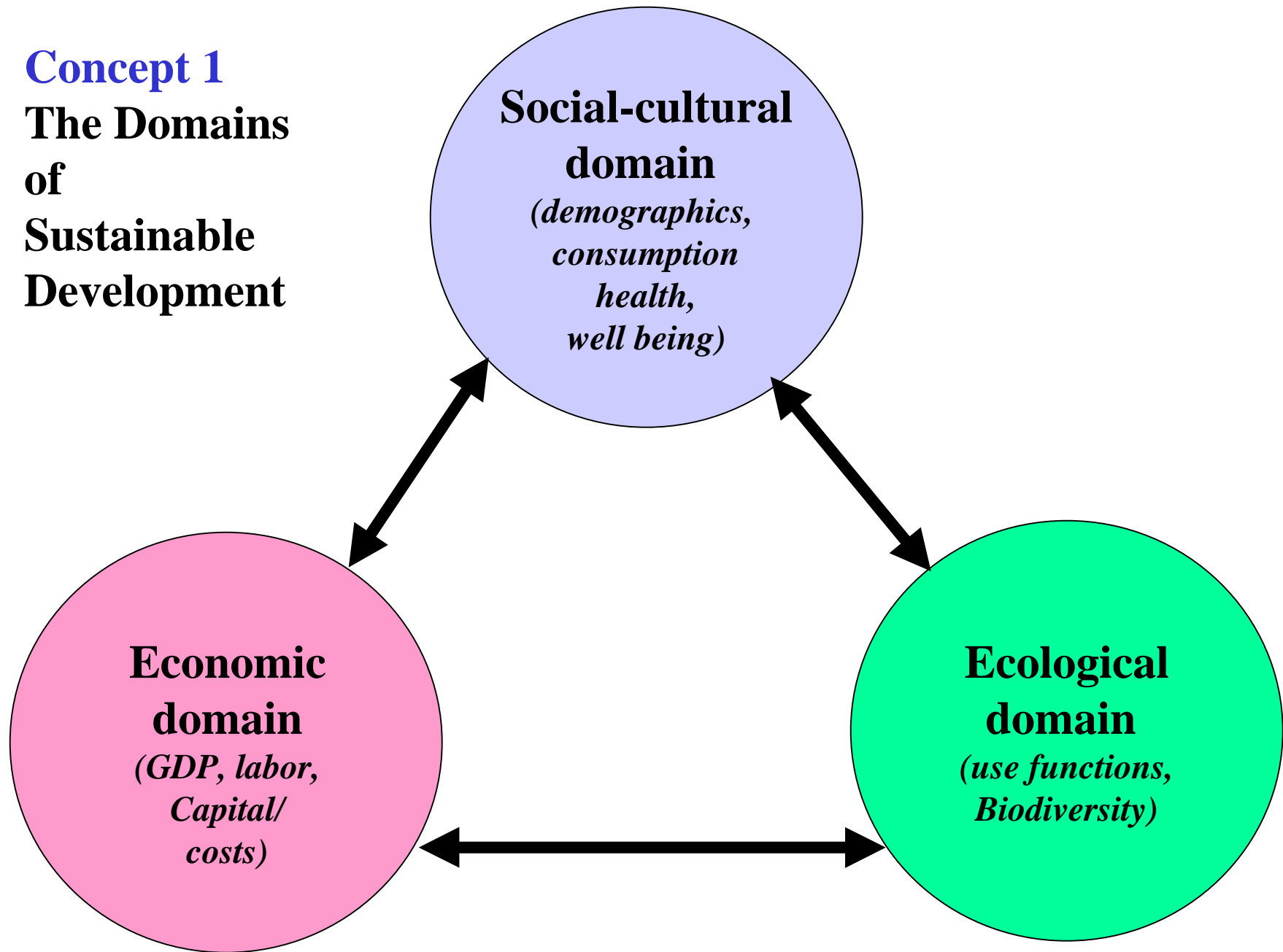
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The Domains of Sustainable Development

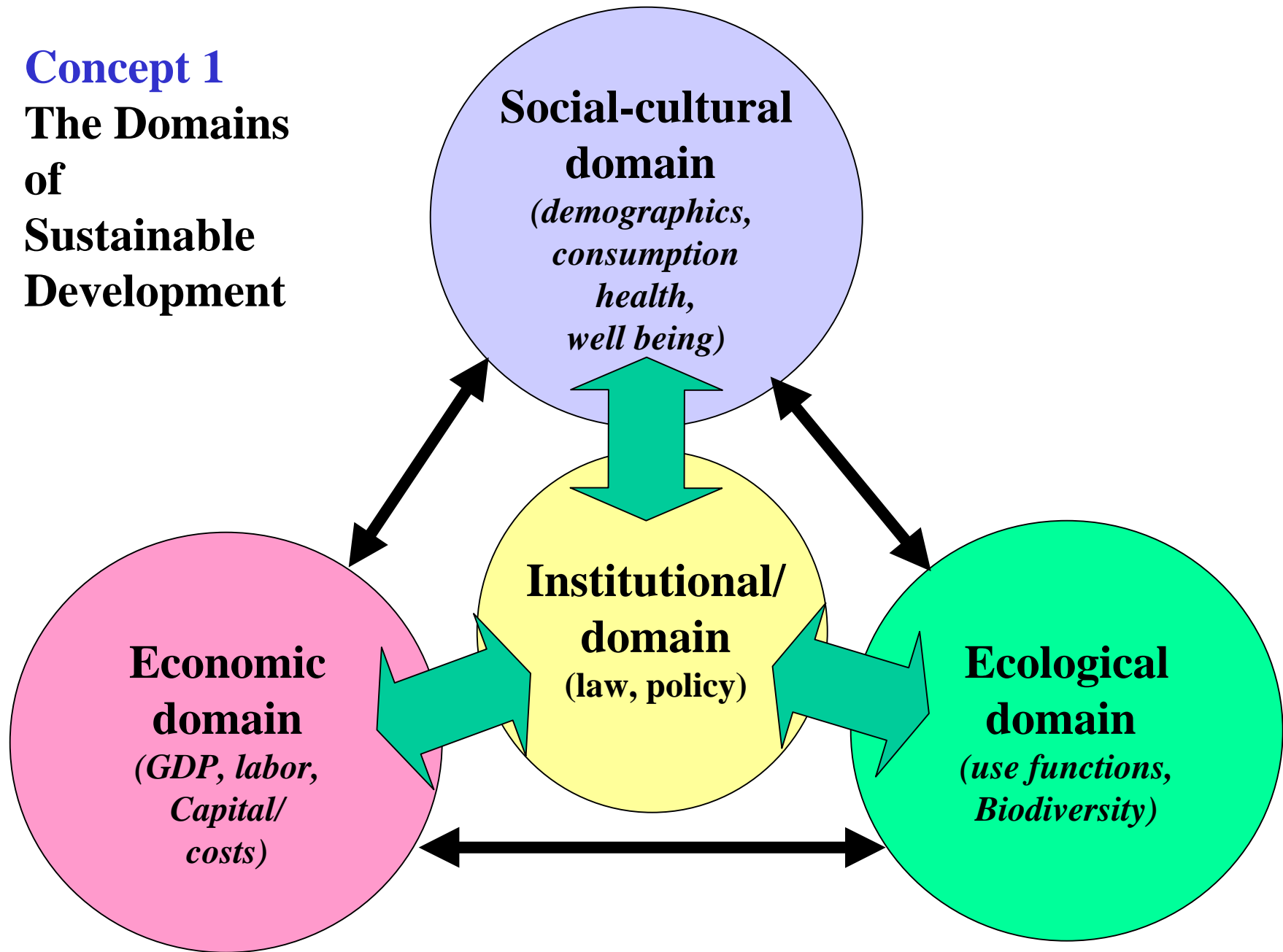


Concept 1

The Domains of Sustainable Development

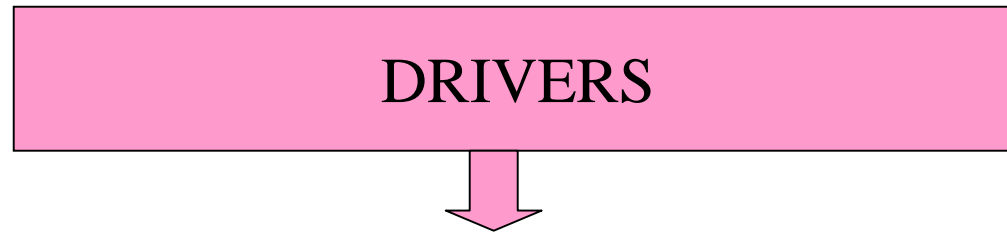


Concept 1
The Domains
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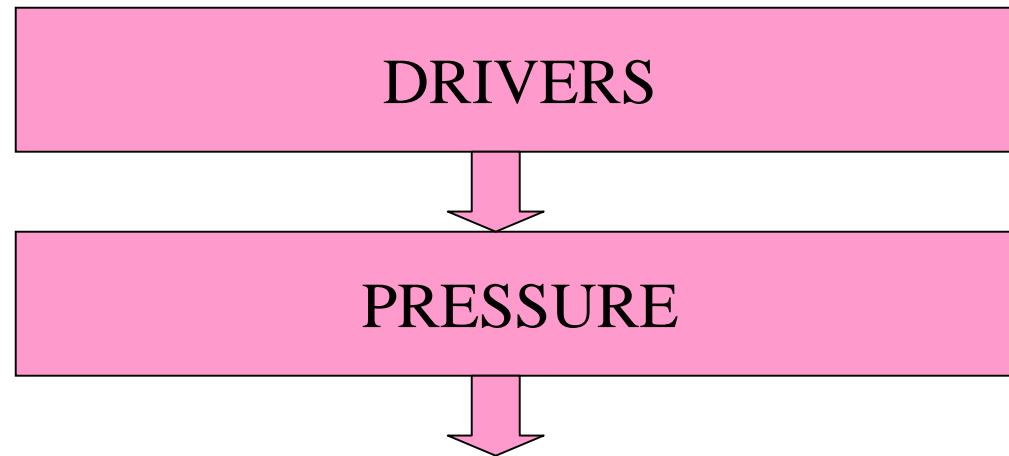


Concept 2: The DPSIR Concept

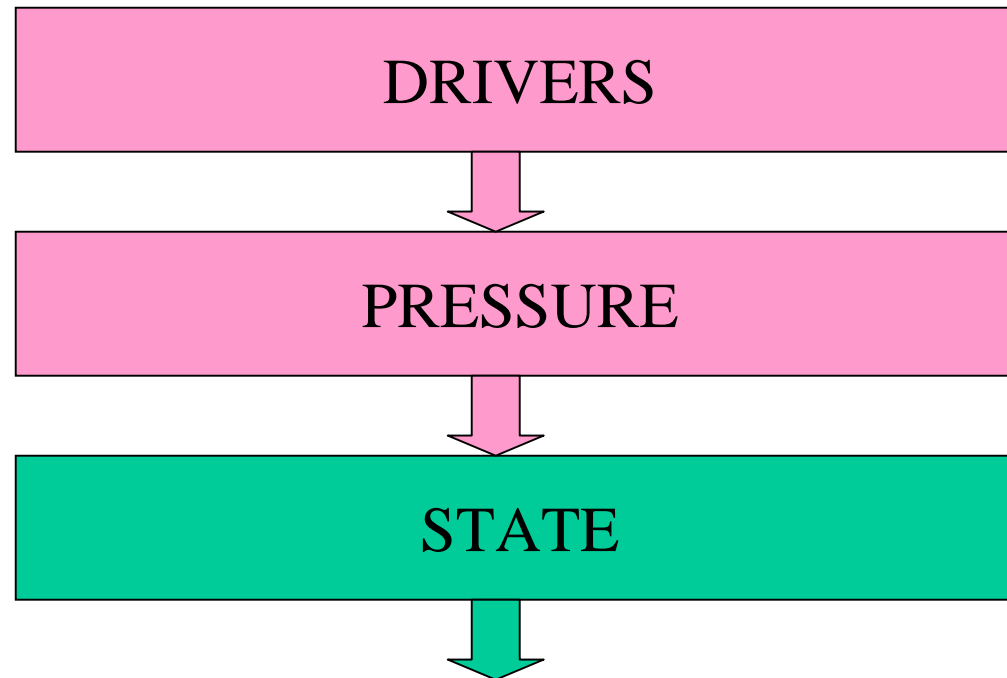
Concept 2: The DPSIR Concept



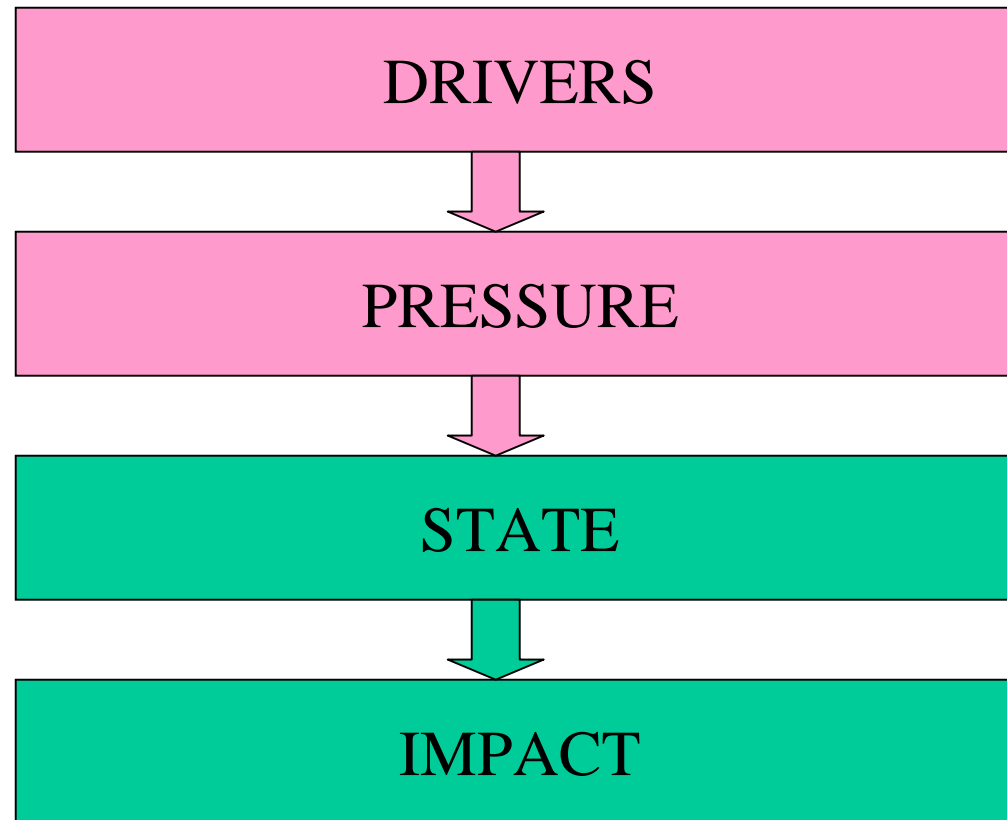
Concept 2: The DPSIR Concept



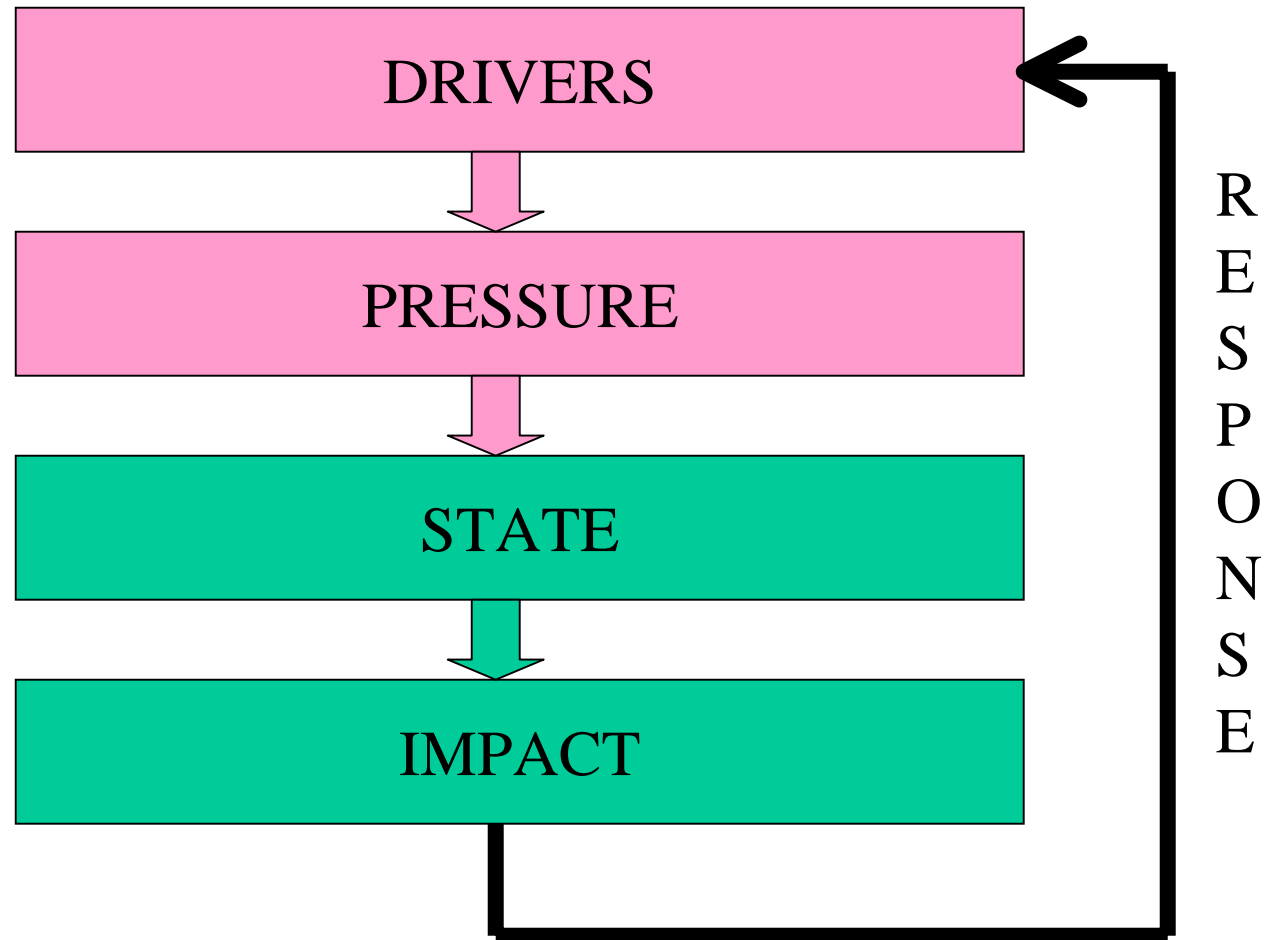
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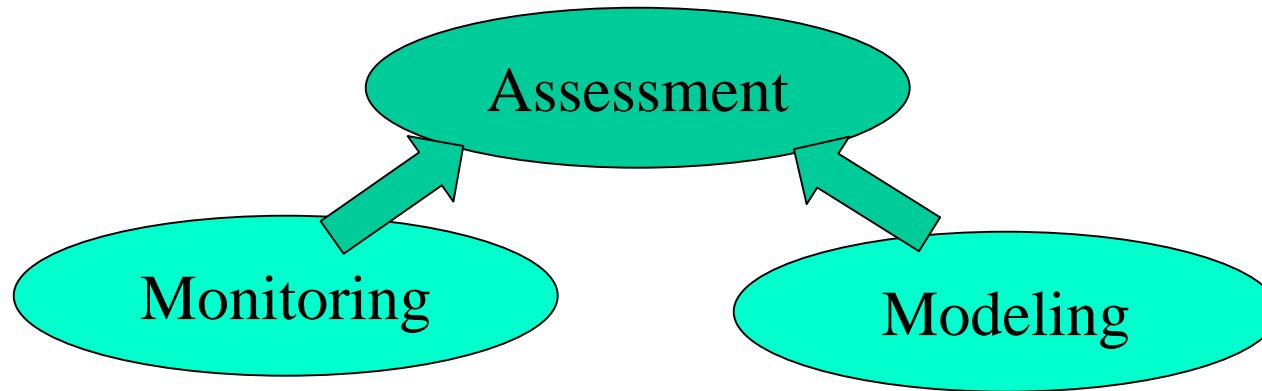


Concept 3:
Assessment
based on
monitoring & modeling

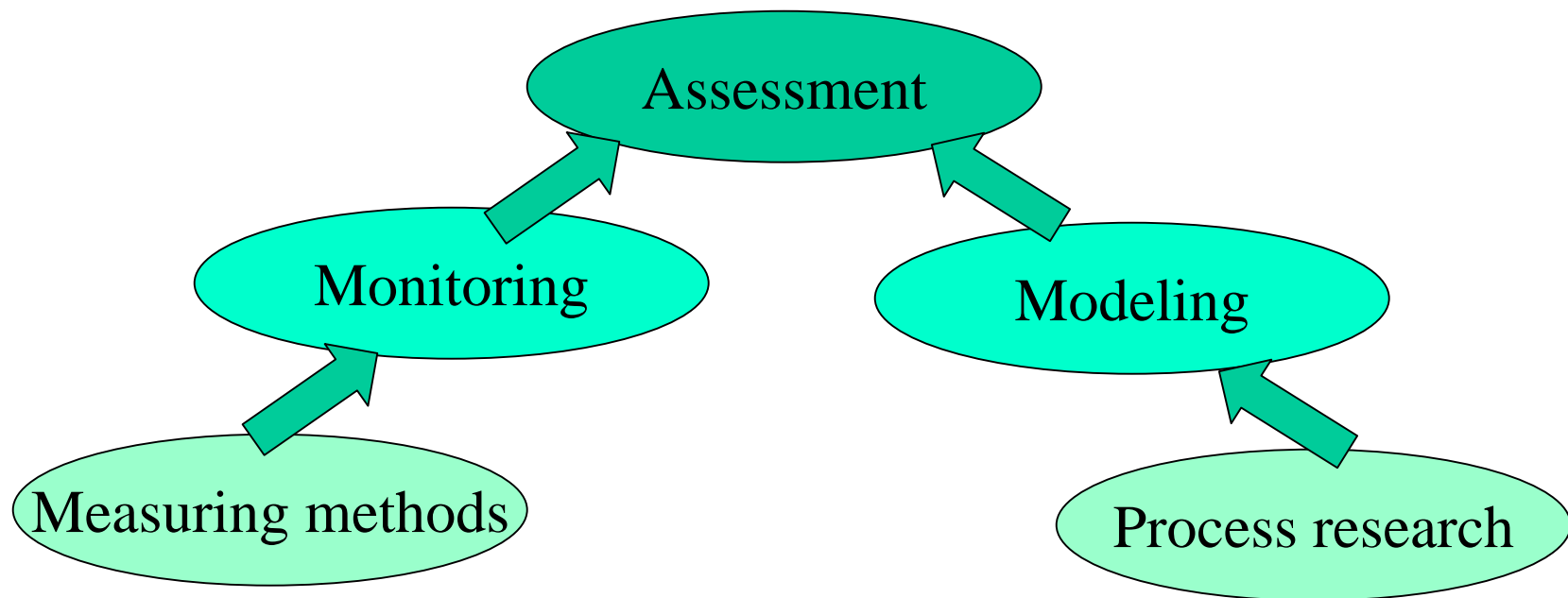


Assessment

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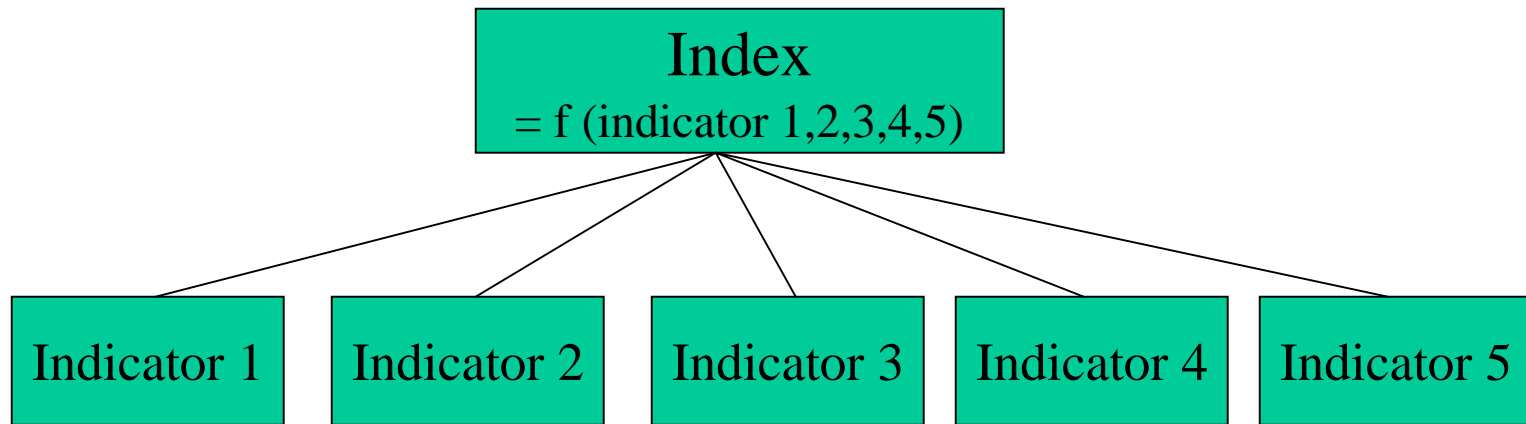


concept 4: index & indicator

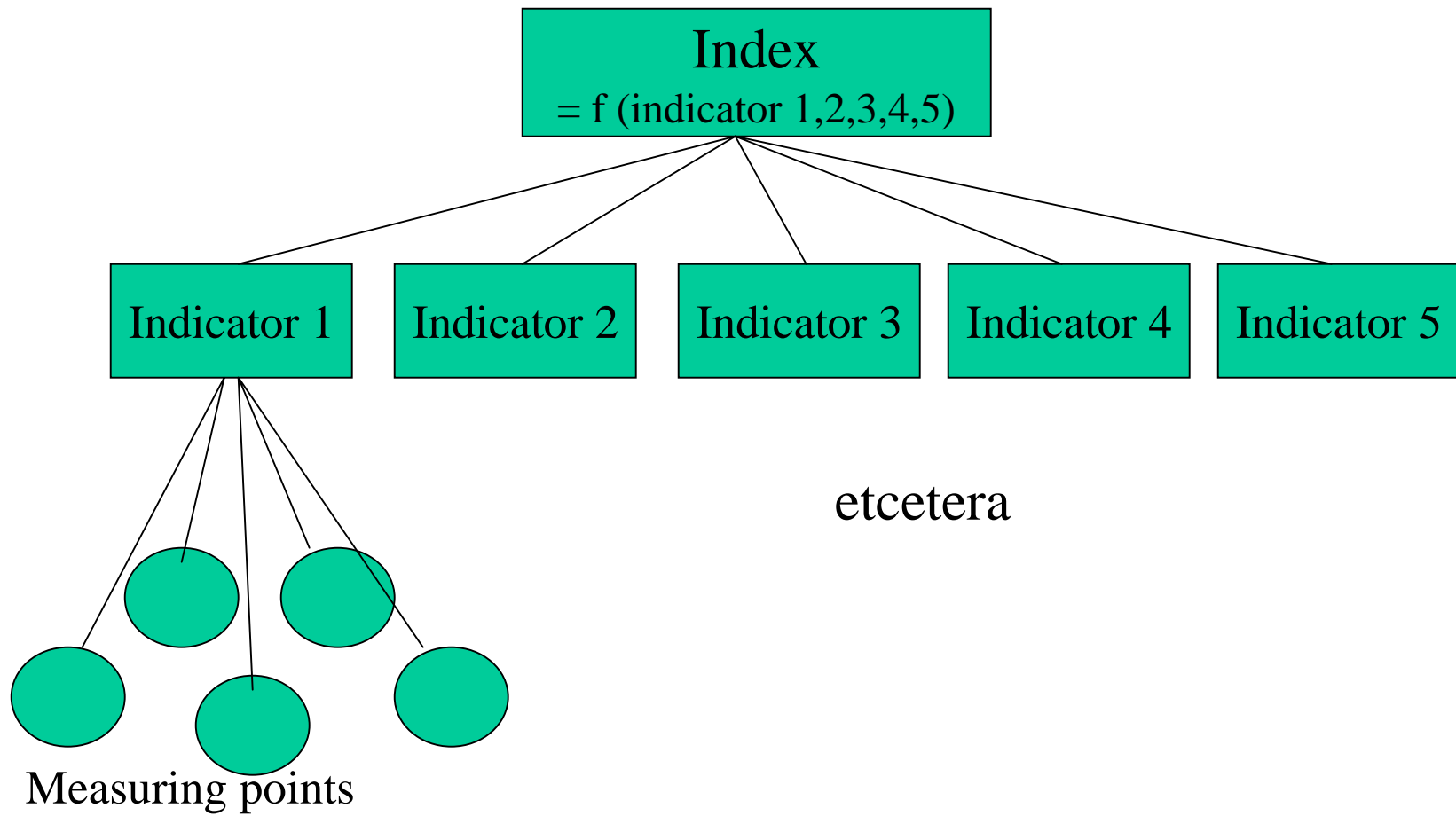
concept 4: index & indicator

Index
= f (indicator 1,2,3,4,5)

concept 4: index & indicator



concept 4: index & indicator



Indicator = more than data on present state

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present state



Indicator = more than data on present state

present state



calculated state with a particular policy
in a particular scenario

Indicator = more than data on present state

reference



present state



calculated state with a particular policy
in a particular scenario

Indicator = more than data on present state

reference



present state



target



calculated state with a particular policy
in a particular scenario

Concept 5: Hard versus Soft Sustainability

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1. SUSTAINABILITY BASED ON **HARD CONSTRAINTS**
W.R.T. CARRYING CAPACITY AND
VULNARABILITY OF THE DOMAINS

Concept 5: Hard versus Soft Sustainability

1. SUSTAINABILITY BASED ON **HARD CONSTRAINTS**
W.R.T. CARRYING CAPACITY AND
VULNARABILITY OF THE DOMAINS
2. SUSTAINABILITY BASED ON **(SOFT) EXCHANGE**
OF CAPITAL BETWEEN THE DOMAINS OF
SUSTAINABLE DEVELOPMENT

Part 2: Application

**National Environmental Outlook 5
2000-2030**

The issue:
Sustainable development of the Netherlands,

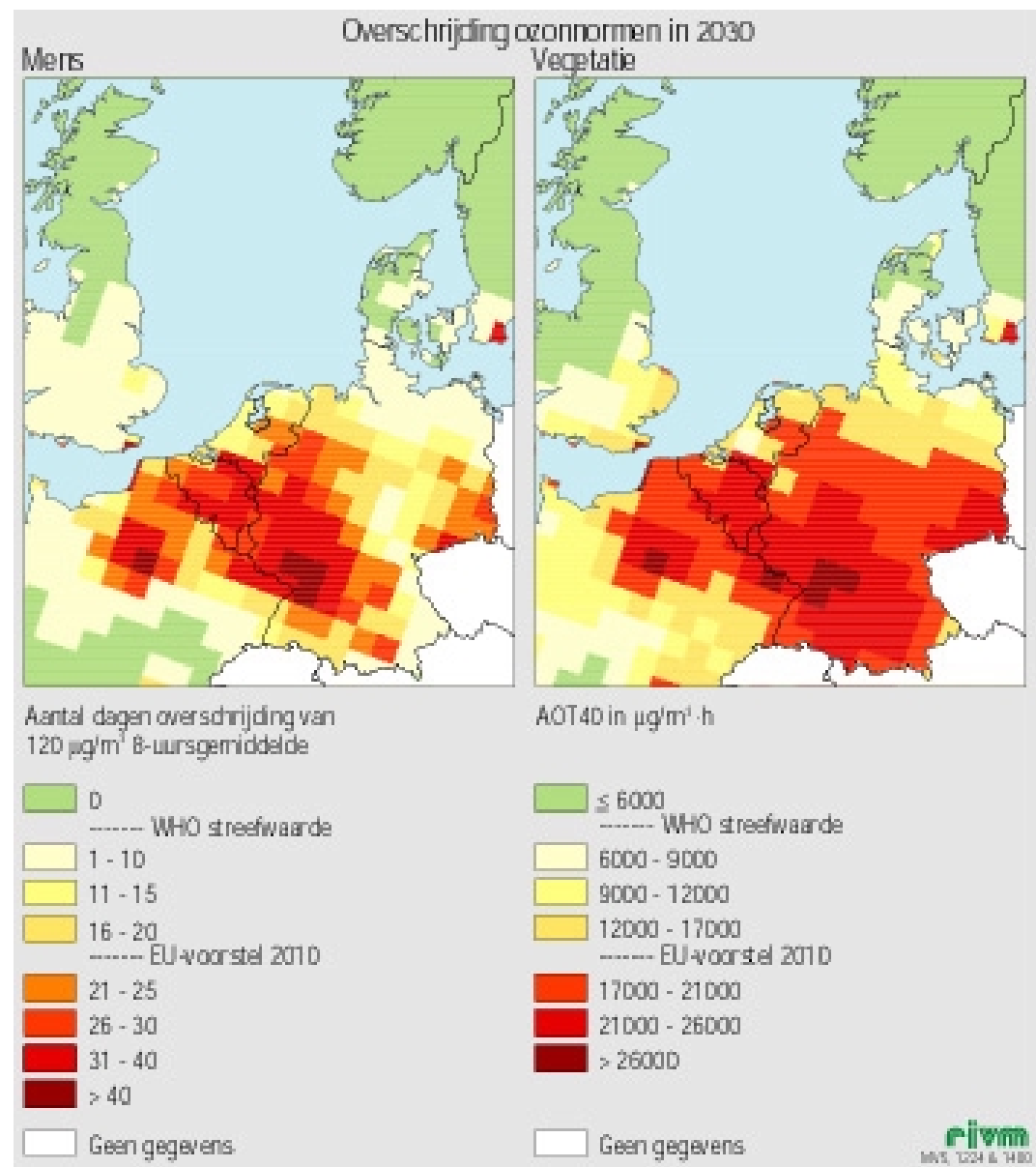
**The issue:
Sustainable development of the Netherlands,**

or

**The issues of sustainable GLOBAL development
from the perspective of a small,
but relatively advanced and rich delta nation**

**The Netherlands:
an open economy
with transboundary
environmental
problems**

The Netherlands: an open economy with transboundary environmental problems



2. Sustainable Development on a Global Scale

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2.1 DRIVERS & PRESSURES:

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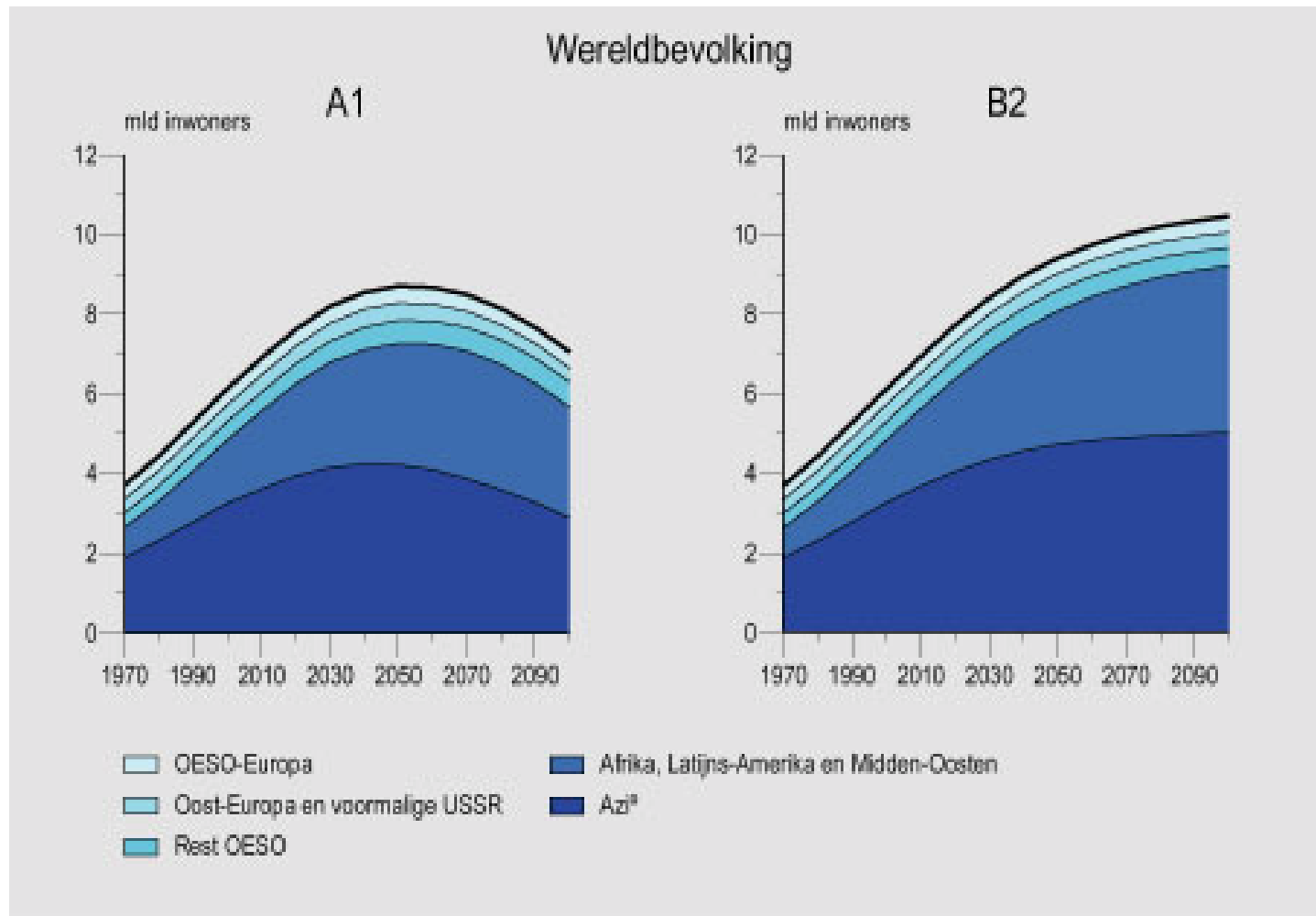
Population is growing, especially in developing countries

GWP and energy use increase considerably

Demand for land is increasing due to the need for food and due to urbanisation

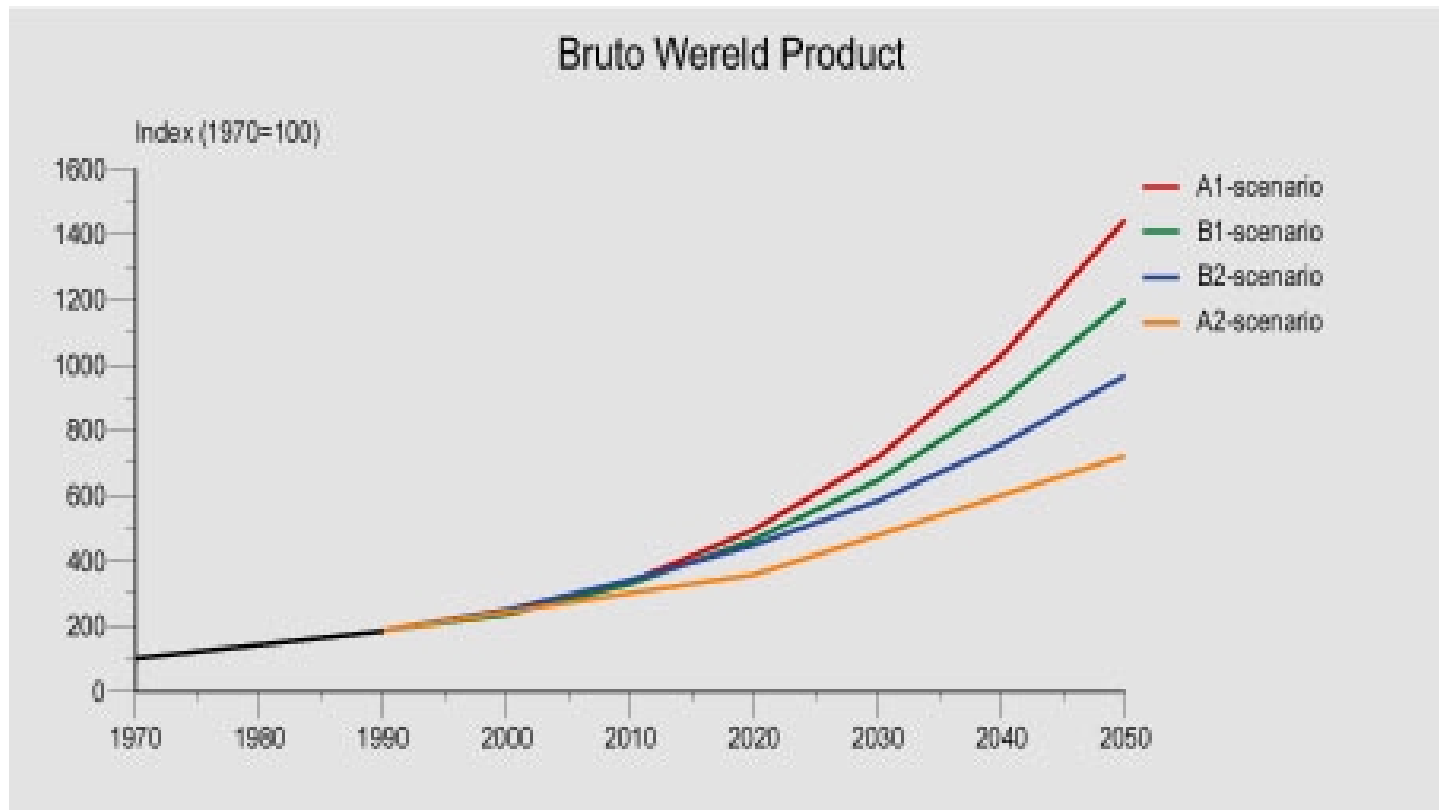
More environmental damage is caused in the Netherlands through *production for export than through import of products* by the Netherlands

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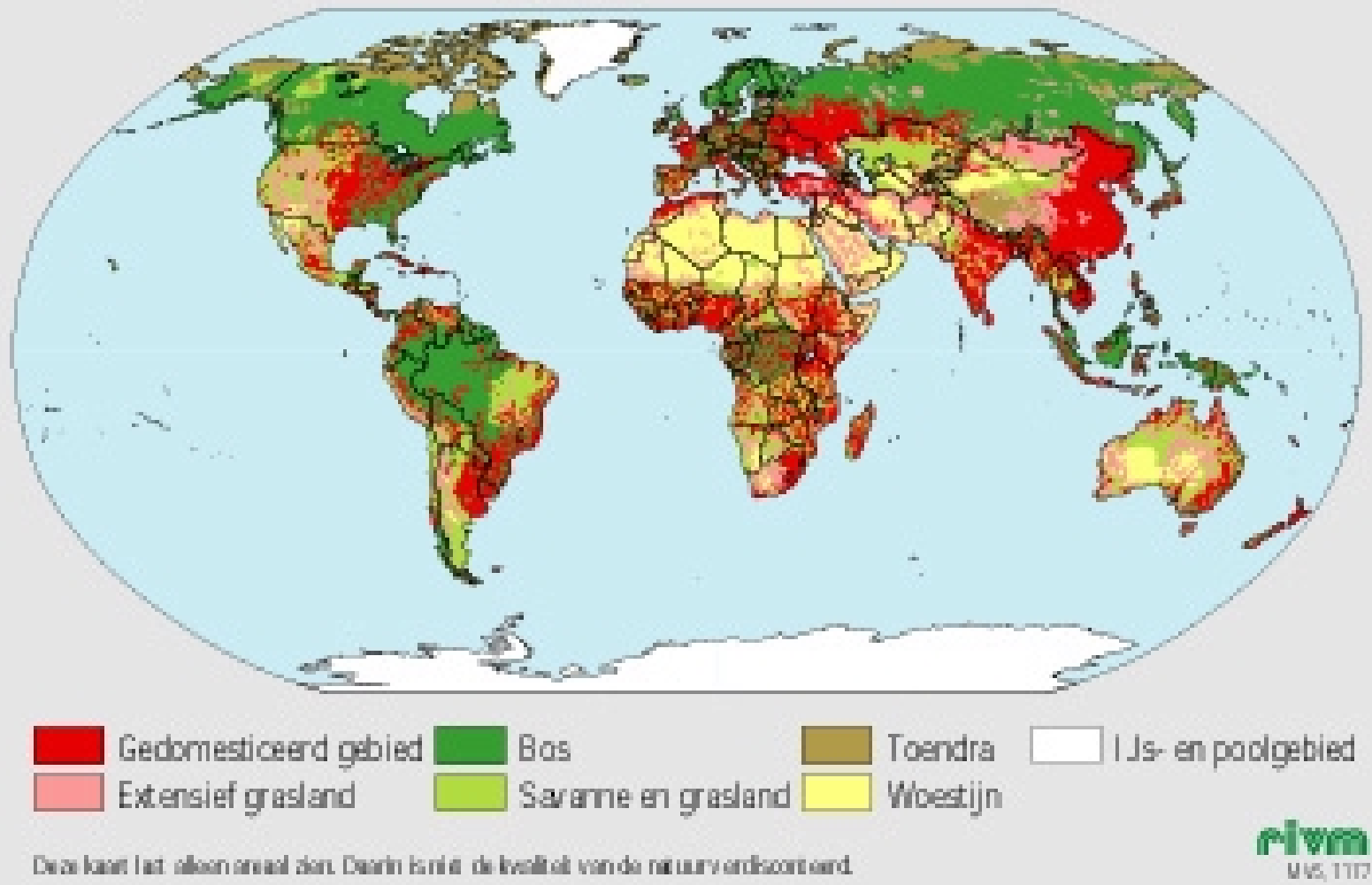
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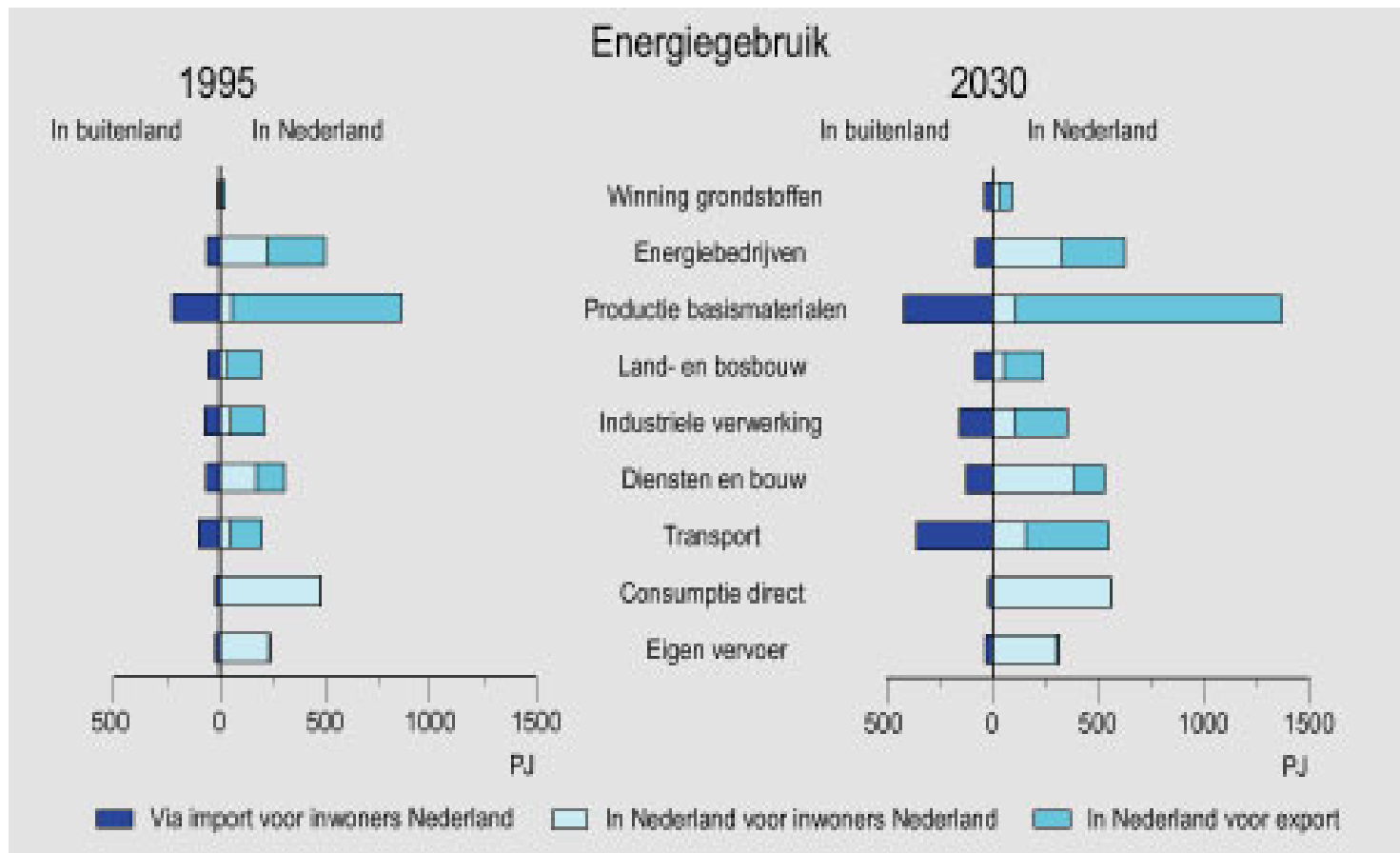
***Demand for land** is increasing due to the need for food
and due to urbanisation*

Landgebruik 2030



Demand for land is increasing due to the need for food
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2.2 STATE & IMPACTS

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***Climate:** Persistent problem with severe consequences*

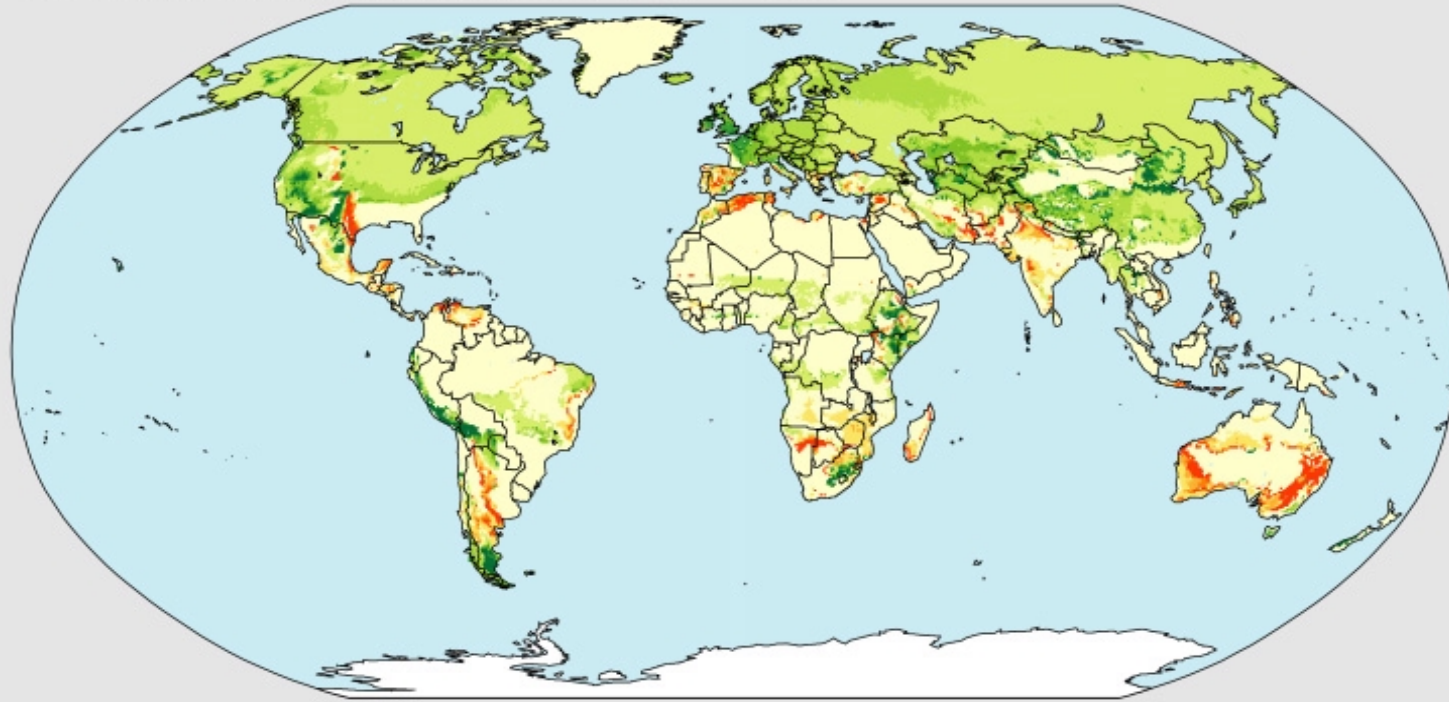
***Biodiversity:** Greatest decline in areas with the greatest species diversity*

*Limits to the **fish catch** are near at hand*

*Economic growth and better **health** are often interconnected*

Climate: *Persistent problem with severe consequences*

Verandering lengte groeiseizoen 1990 - 2050



Gemiddeld per decennium

Afname in dagen

Toename in dagen



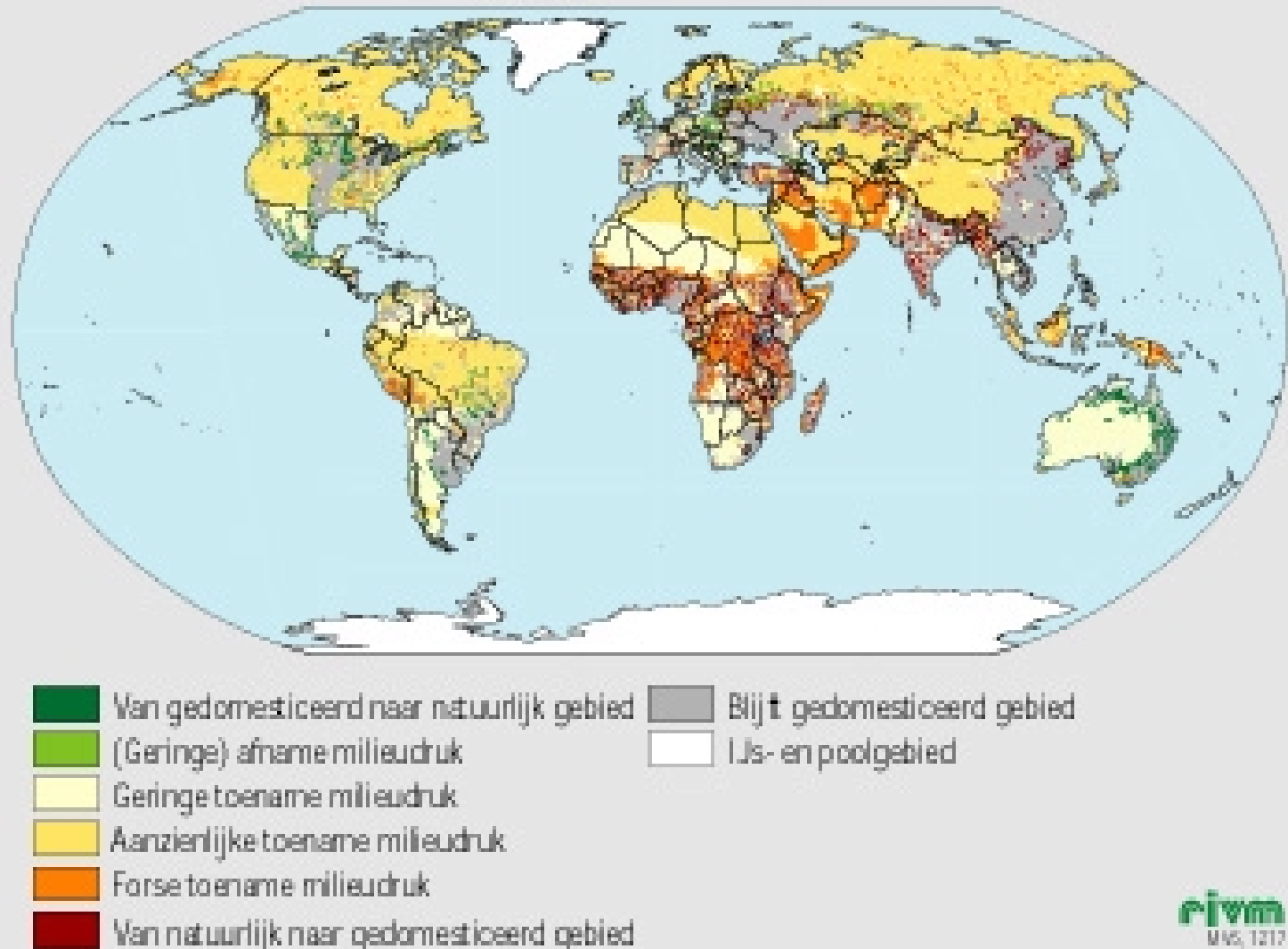
10 7,5 5 2,5 0 2,5 5 7,5 10
en meer en meer

rivm
MV5, 1211

Climate: Persistent problem with severe consequences

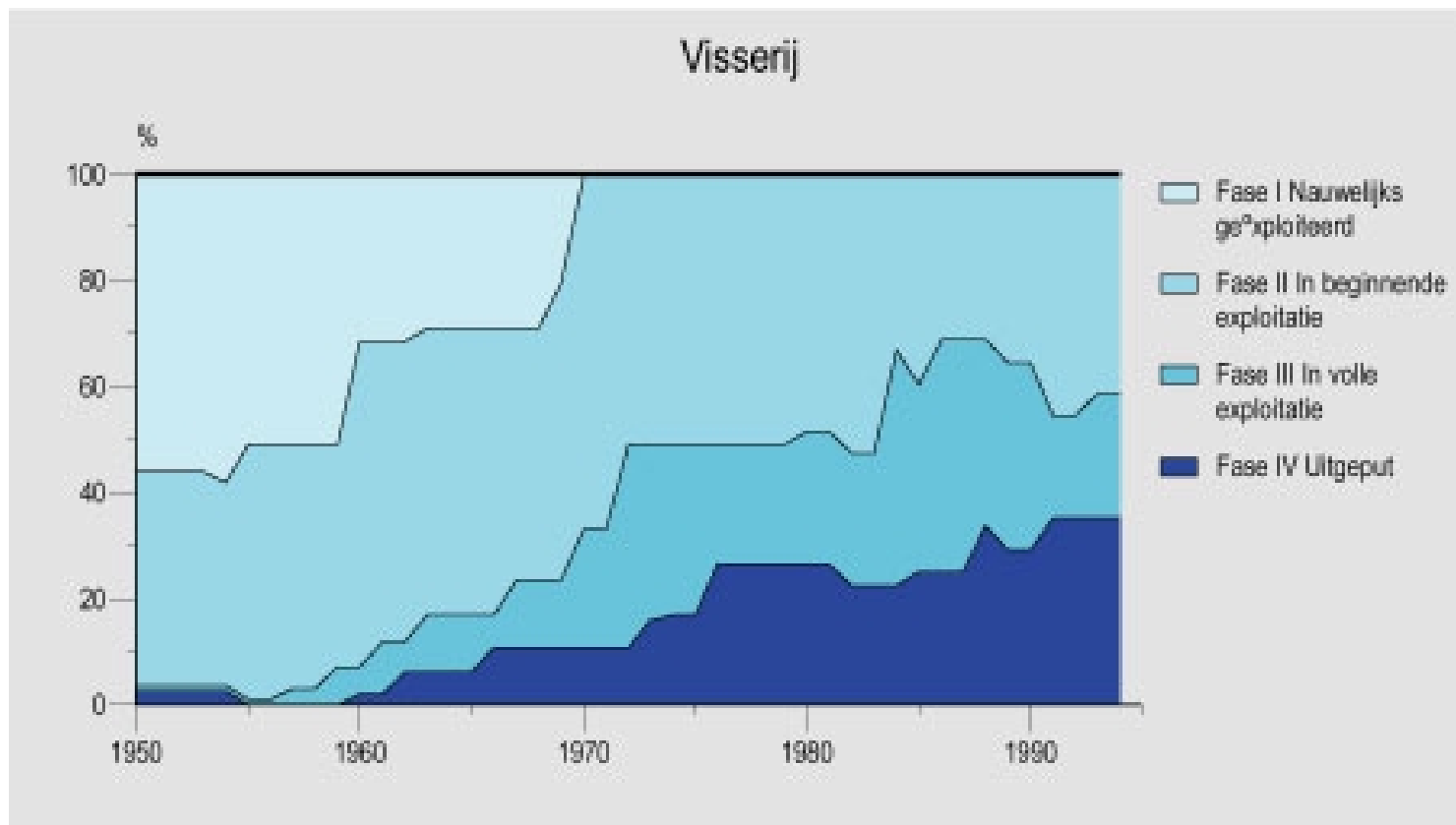
Biodiversity: *Greatest decline in areas with the greatest species diversity*

Verandering natuurlijk gebied en milieudruk 1995 - 2030



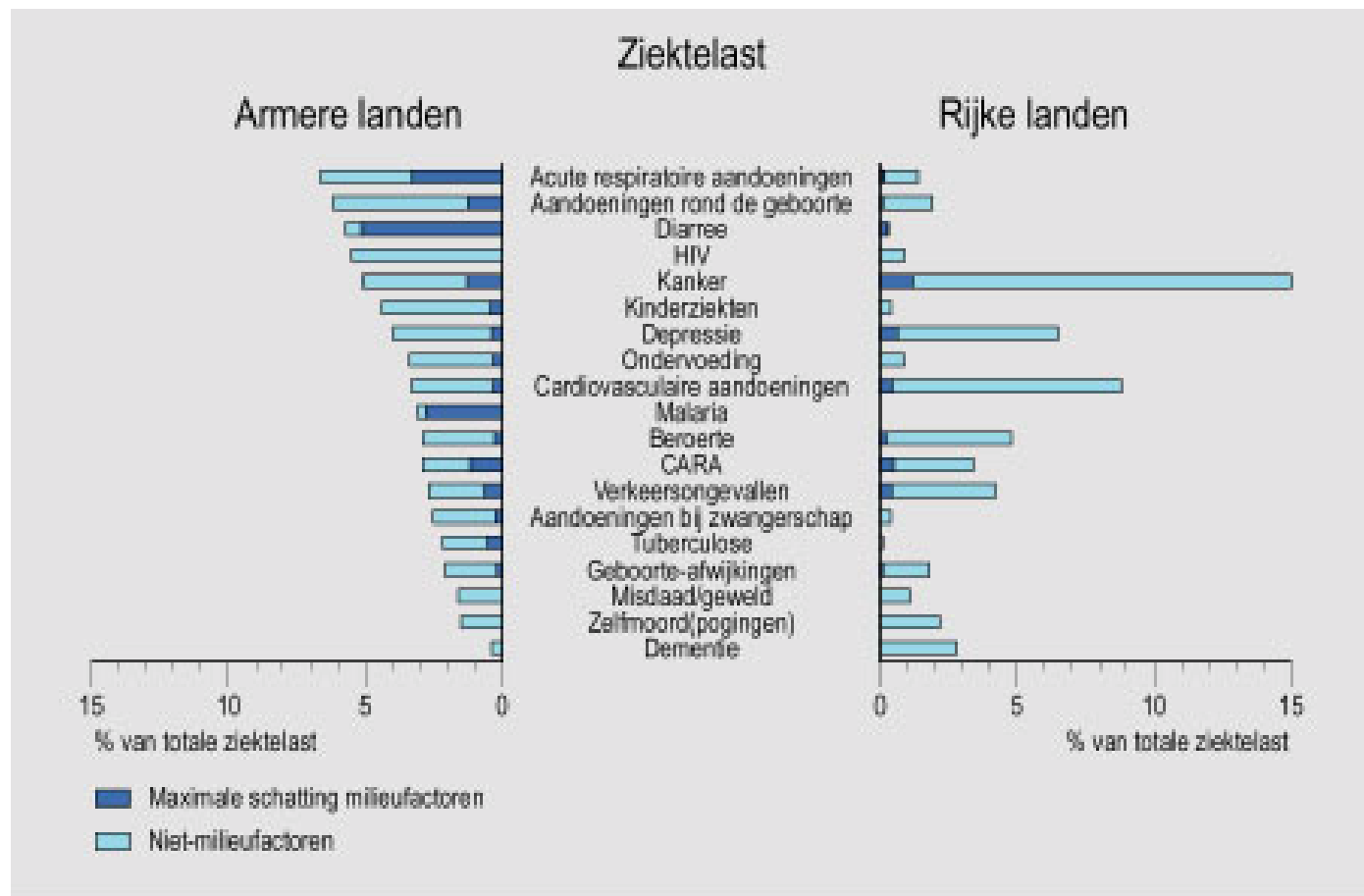
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3. Sustainable development in Europe and the Netherlands

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3.1 DRIVERS & PRESSURES

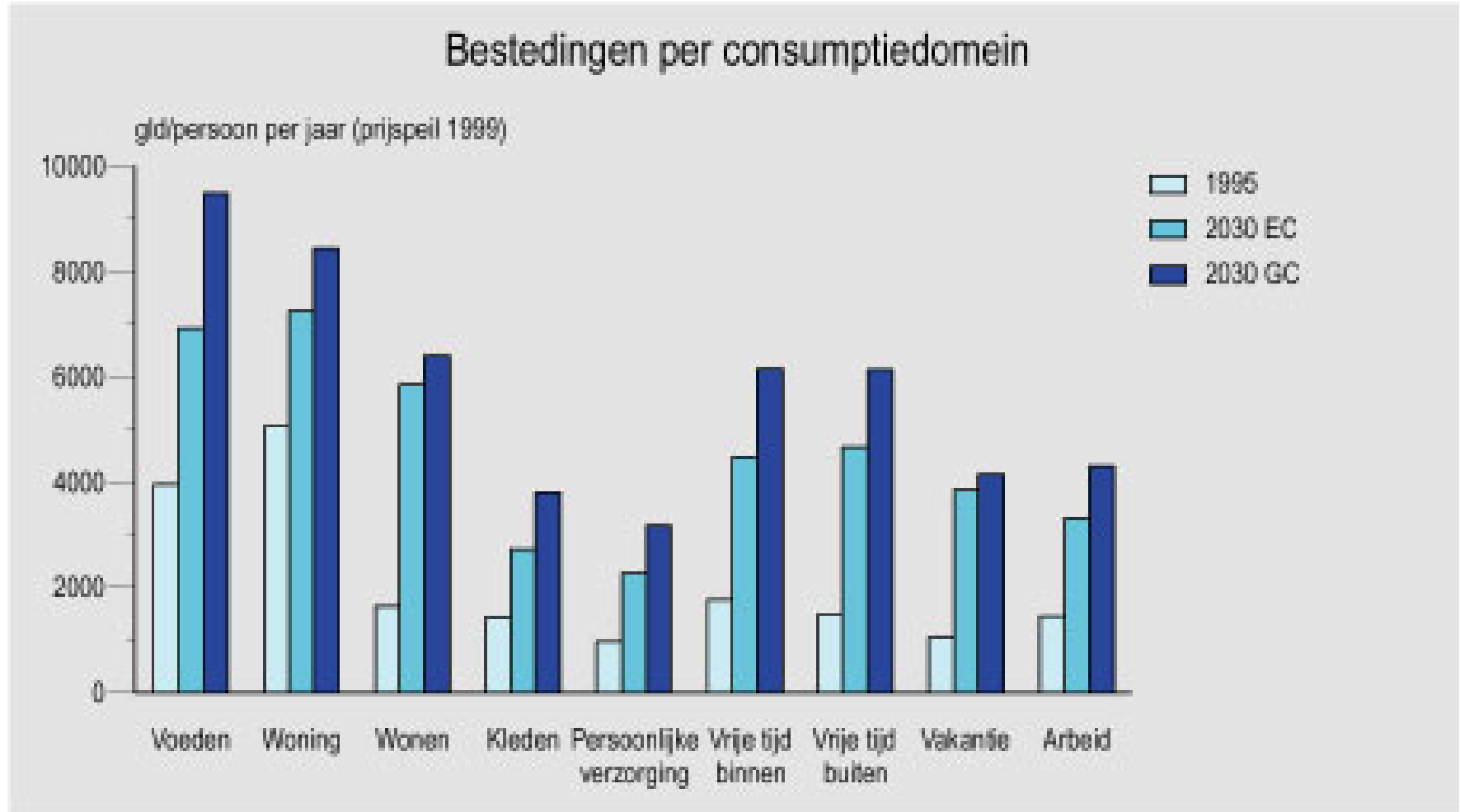
3. Sustainable development in Europe and the Netherlands

3.1 DRIVERS & PRESSURES

*Future environmental pressure in Europe primarily due to **economic growth***

***Land availability** is a key factor in the tension between economy and ecology*

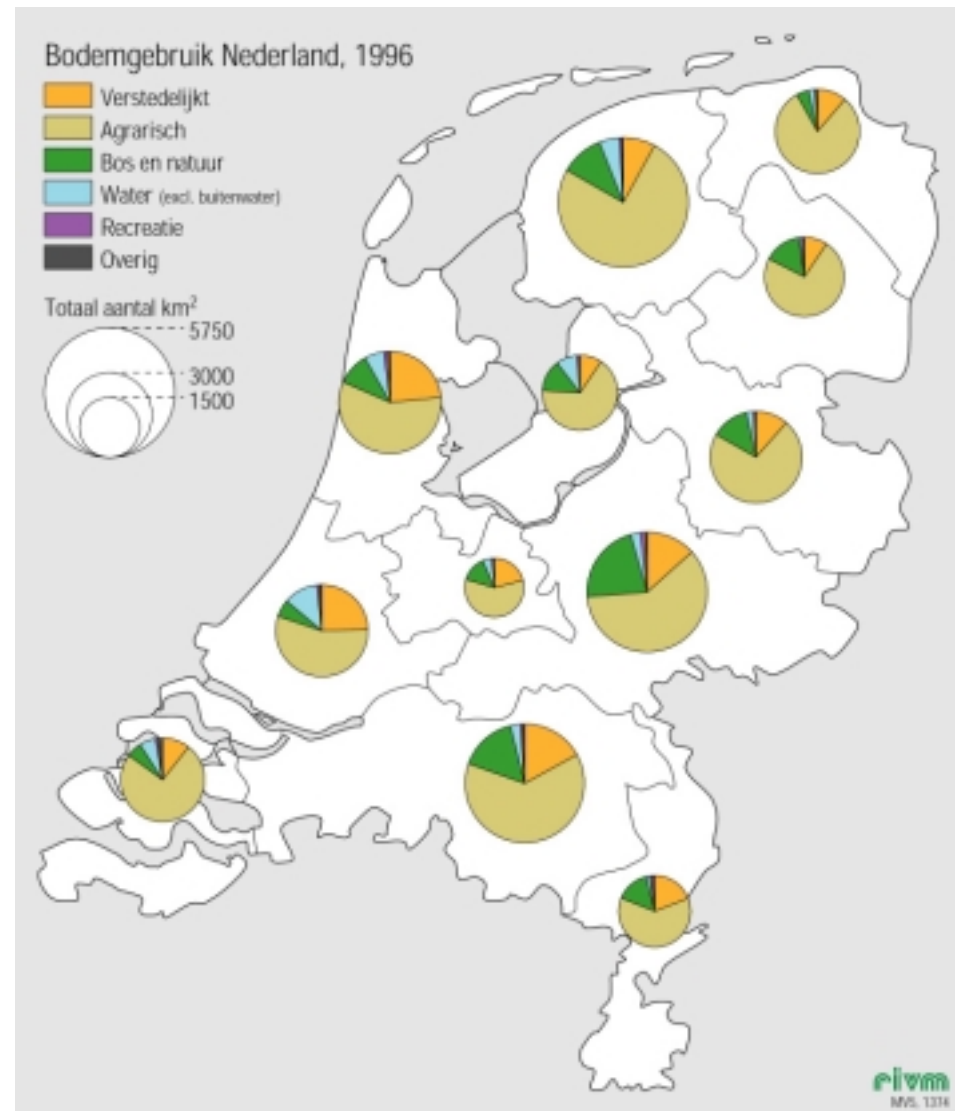
*Future environmental pressure in Europe
primarily due to **economic growth***



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**Land use in
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Nature conservation
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have developed a strong
counterforce against
urbanization**

Land use in the Netherlands is still dominated by agriculture but urbanization is rapidly eating up the open space; Nature conservation and outdoor recreation have developed a strong counterforce against urbanization



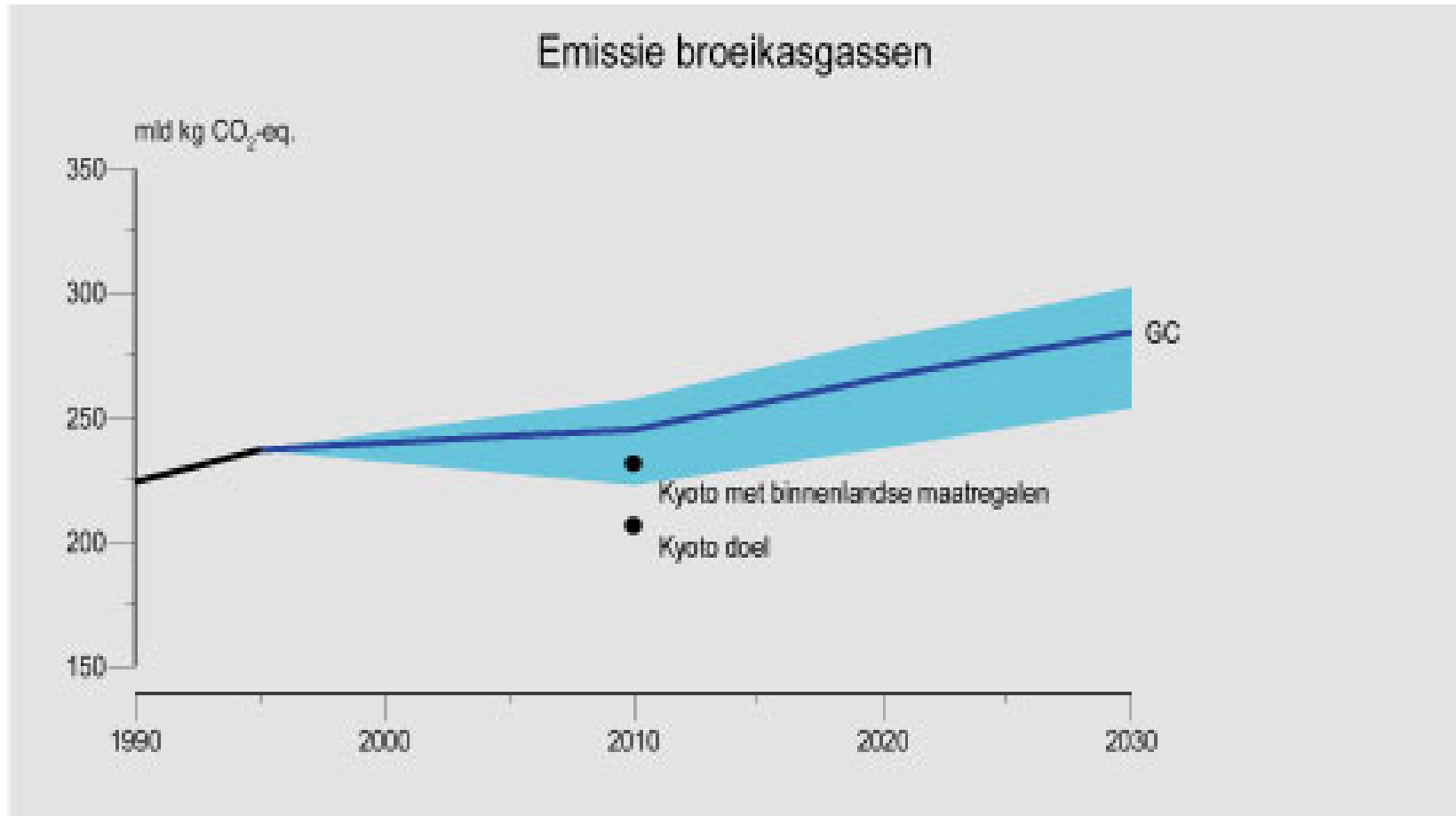
3.2 STATE & IMPACTS

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***Climate:** Far-reaching targets, a difficult start*

*The quality of **the daily life environment***

Climate: Far-reaching targets, a difficult start



Climate: Far-reaching targets, a difficult start

The quality of the daily life environment

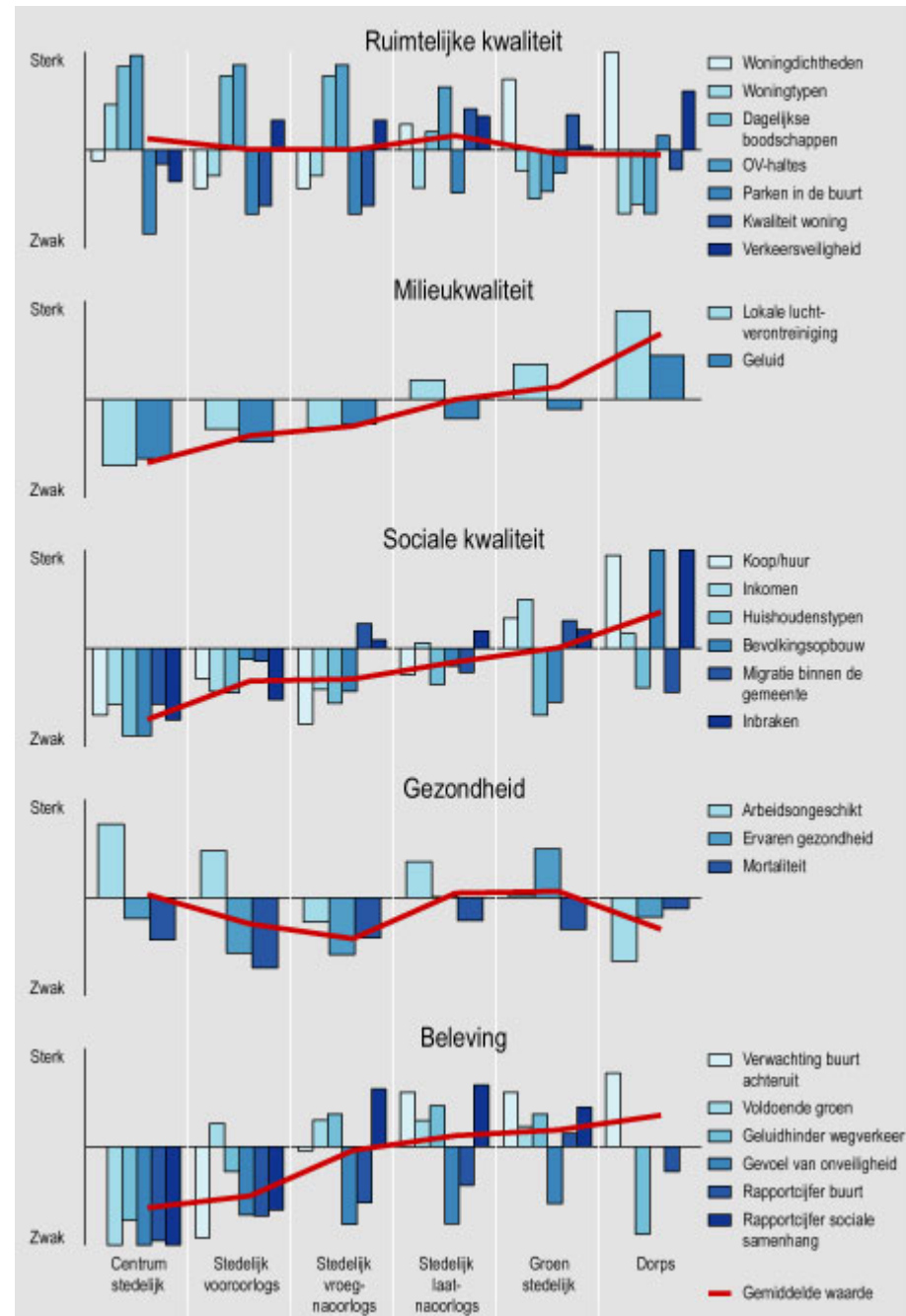
The quality of the daily life environment

Graphs

spatial
environmental
social
health
perception

x-axis

down-town big city
pre-war urban
post-war urban
60's/70's
green urban
rural



4. Perspectives for sustainable development

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- sort out the social dilemma's
- globalisation of environmental policy because of the globalisation of the economy

Thank you